STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
300 W. Preston Street, Suite 202, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

Office of Preparedness & Response
Sherry Adams, Director
Isaac P. Ajit, Deputy Director

November 16, 2012

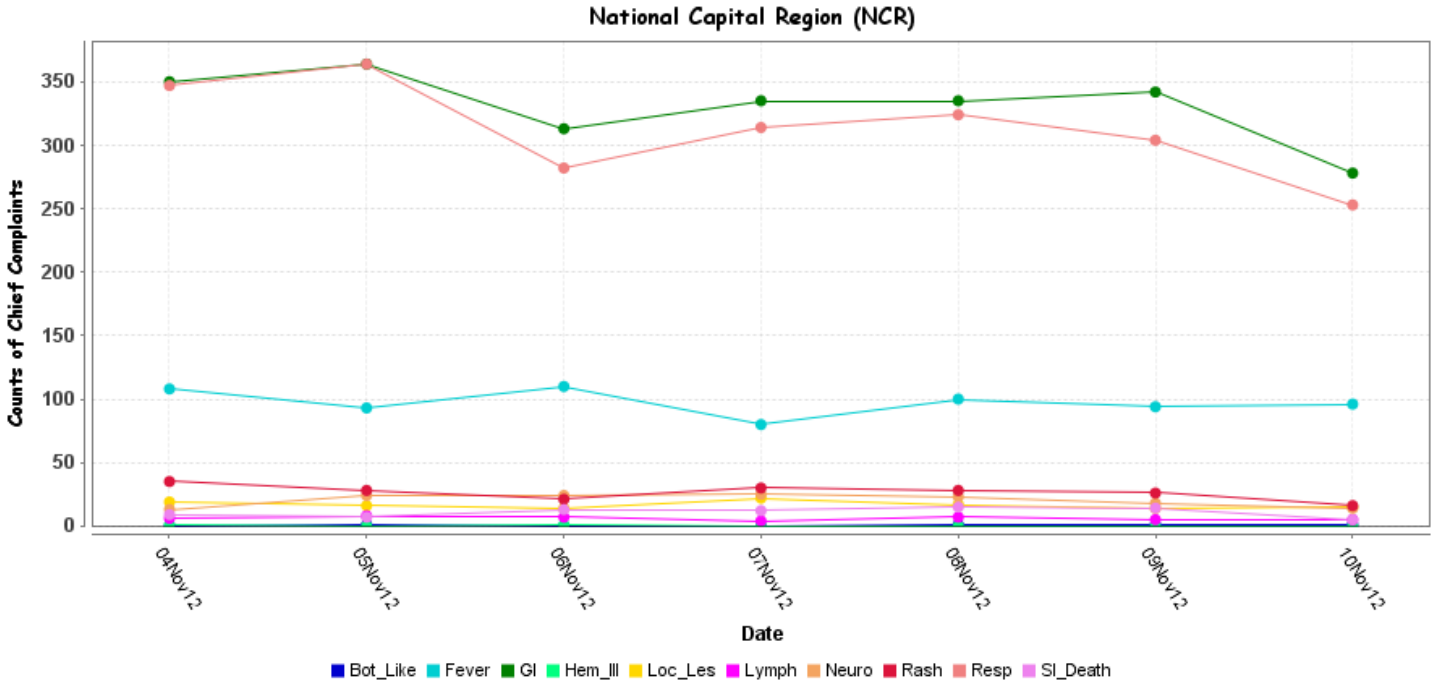
Public Health & Emergency Preparedness Bulletin: # 2012:45
Reporting for the week ending 11/10/12 (MMWR Week #45)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

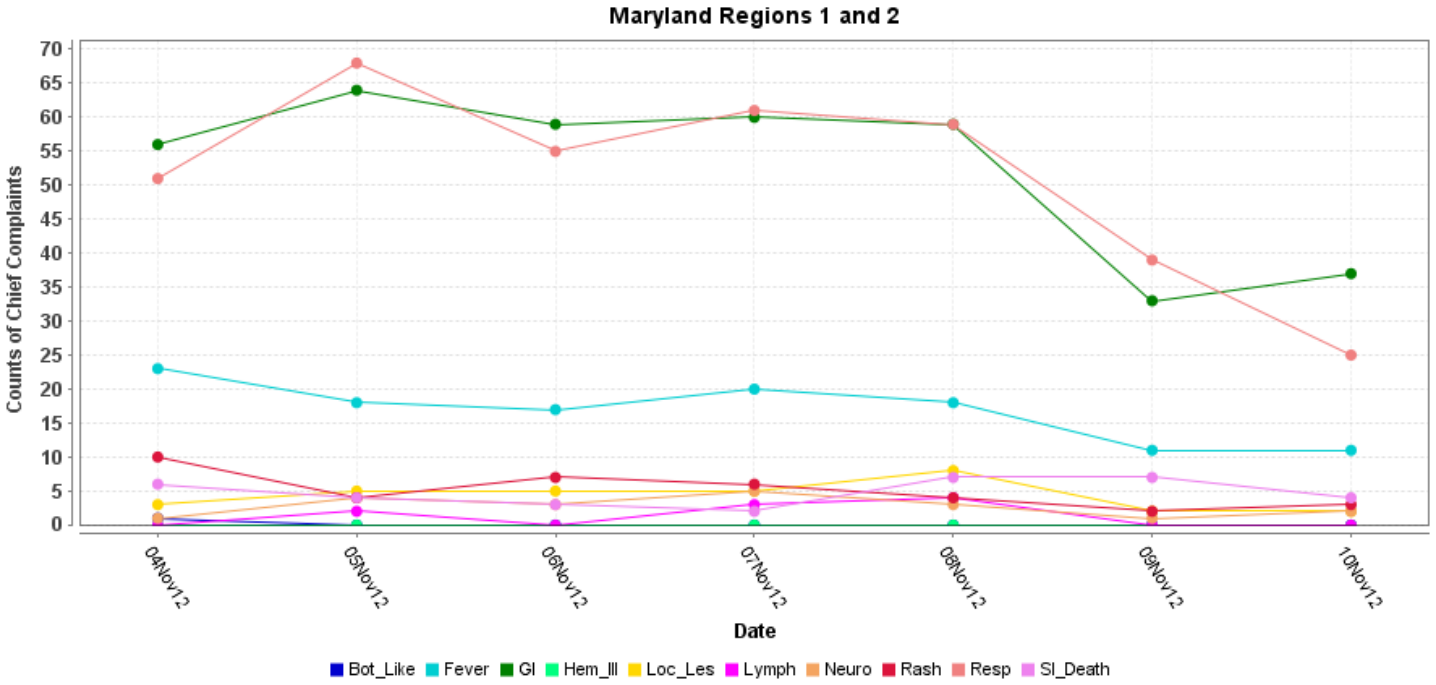
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

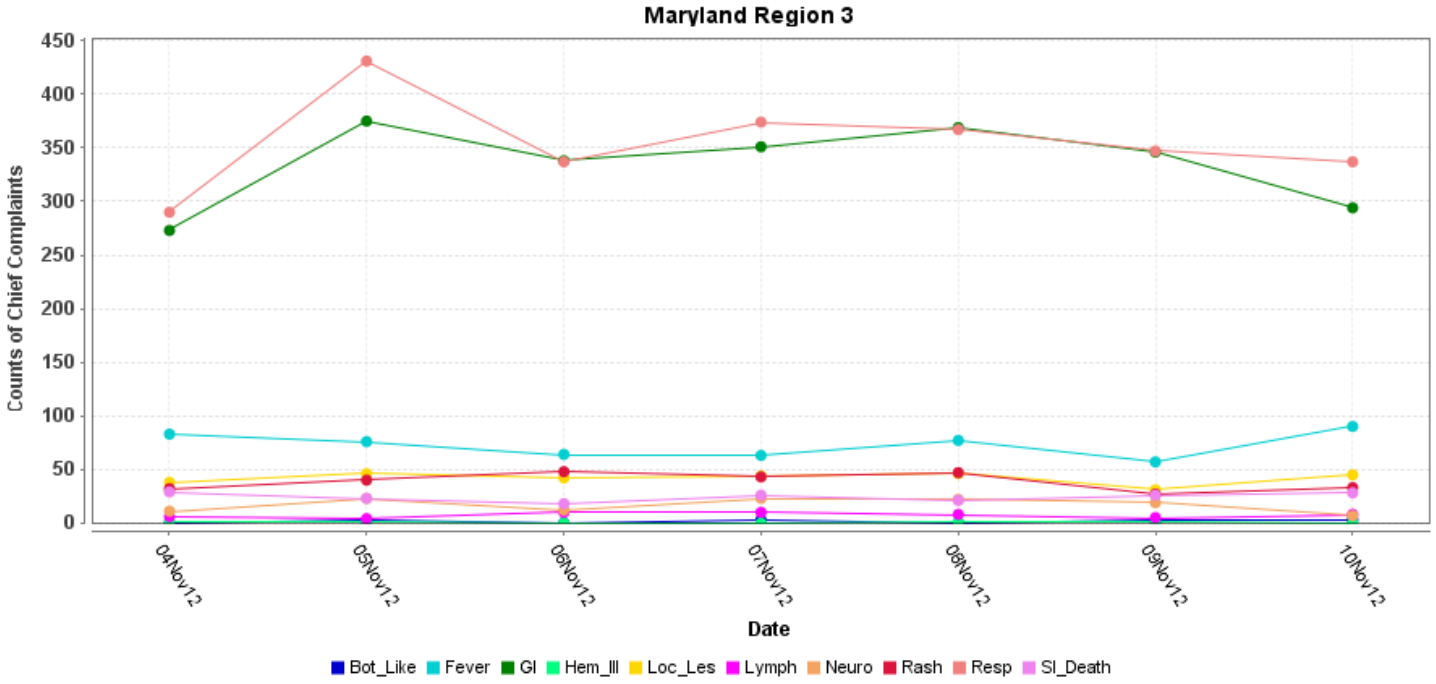


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

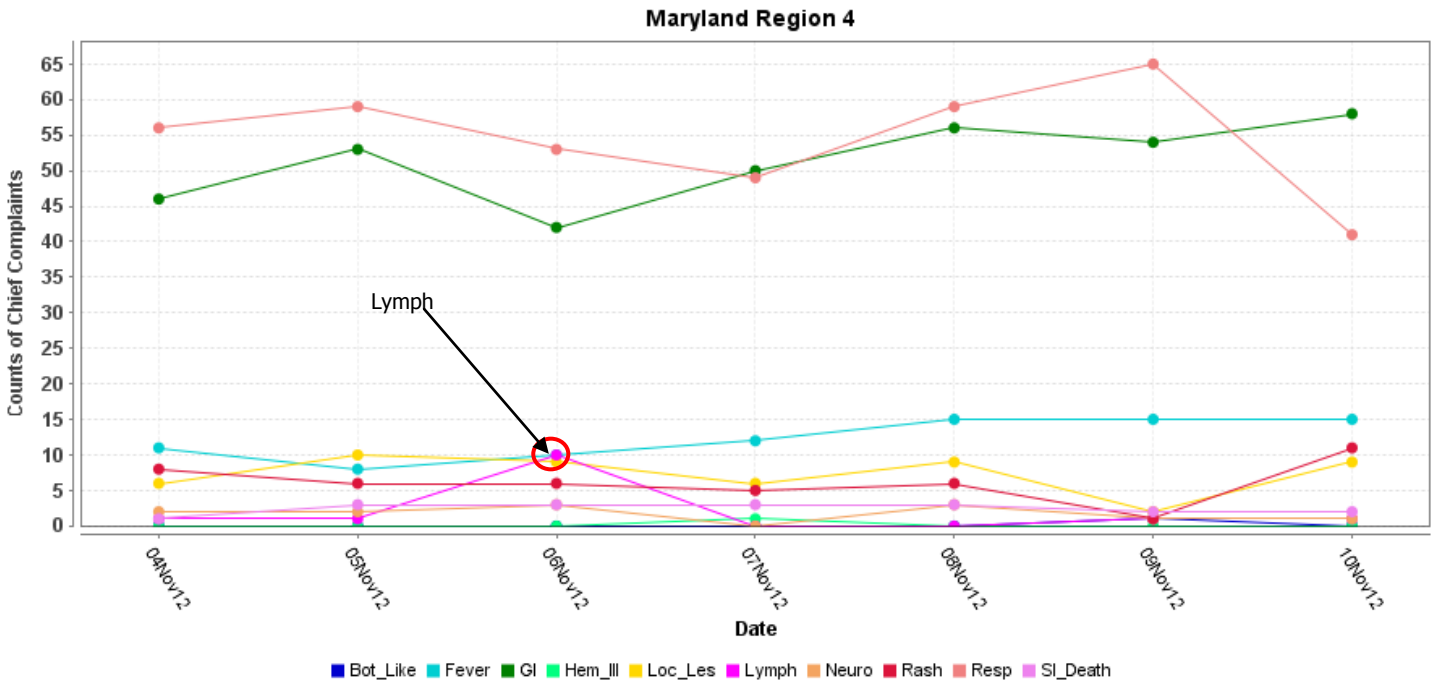
MARYLAND ESSENCE:



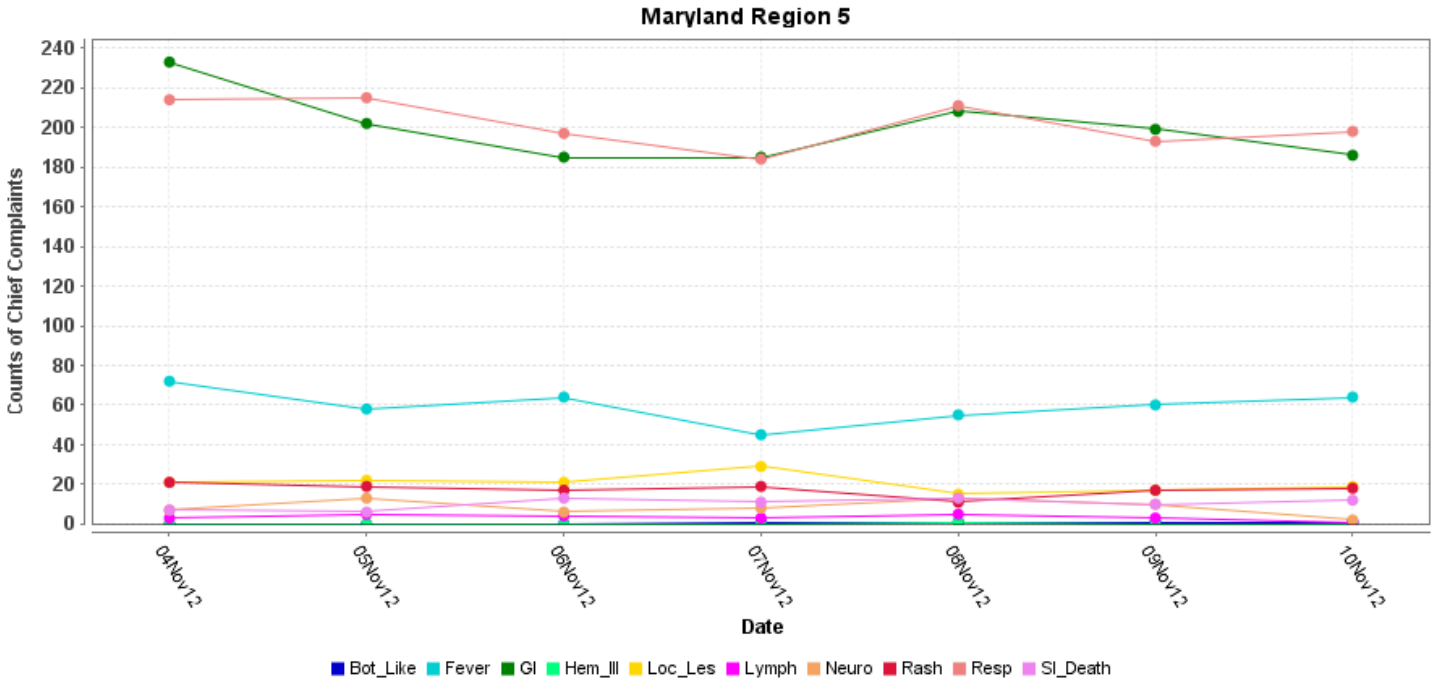
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



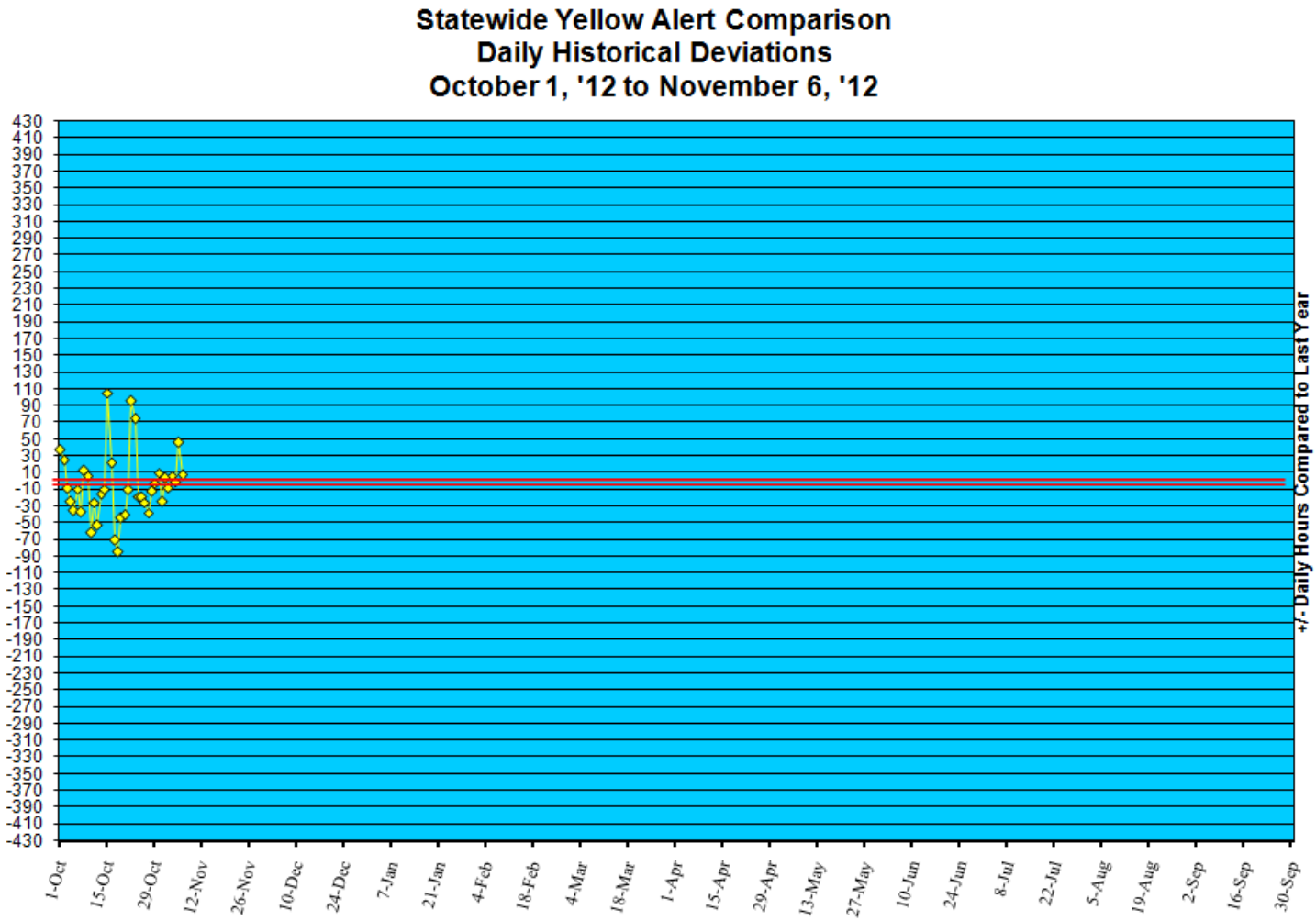
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (November 4 – November 10, 2012):	16	0
Prior week (October 28 – November 3, 2012):	14	0
Week#45, 2011 (November 6 – November 12, 2011):	5	0

1 outbreak was reported to DHMH during MMWR Week 45 (November 4-November 10, 2012)

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in a Nursing Home

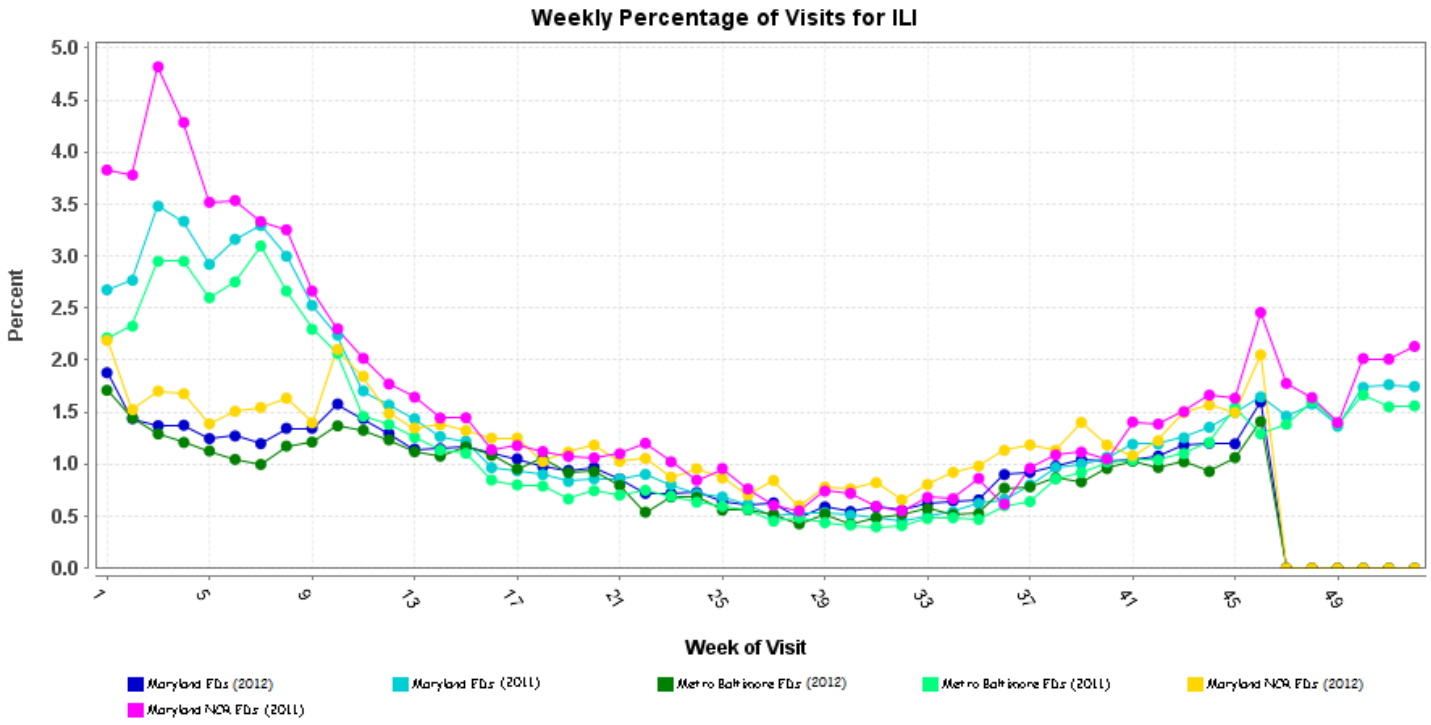
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 45 was: Sporadic Activity with Minimal Intensity.

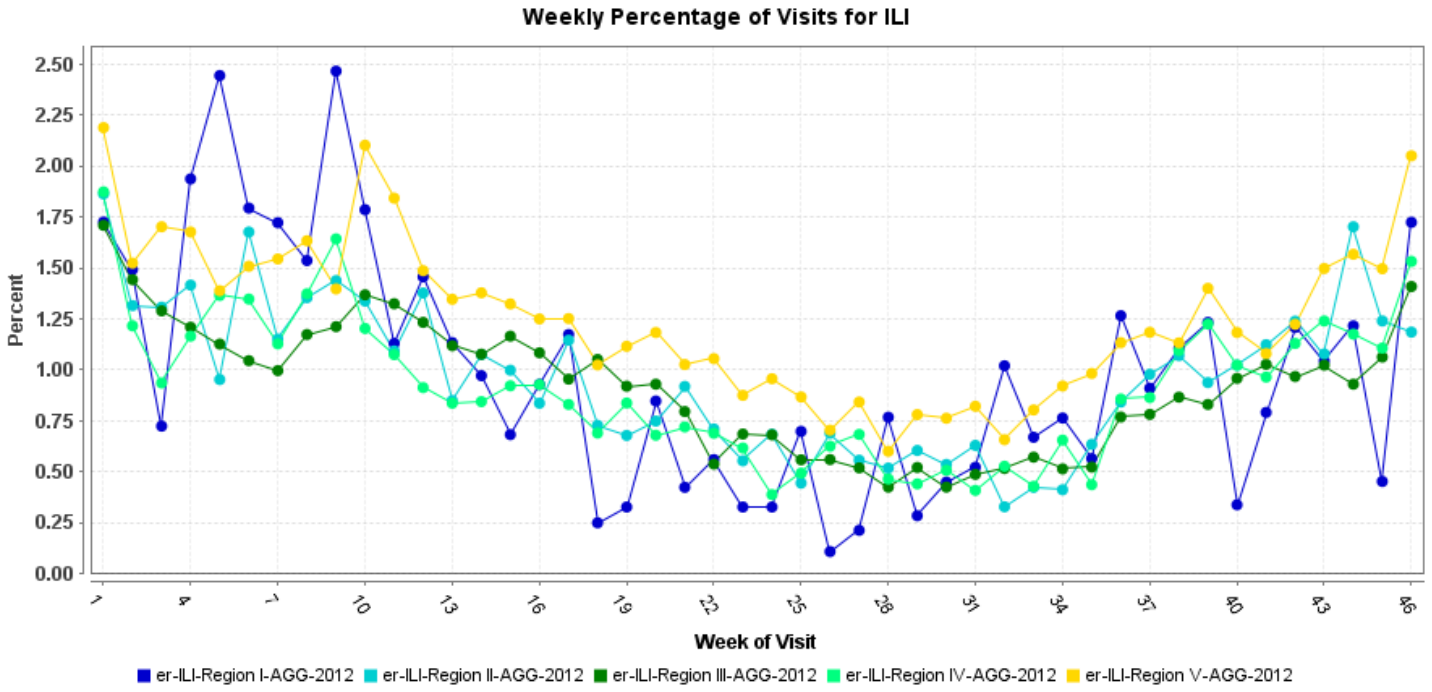
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



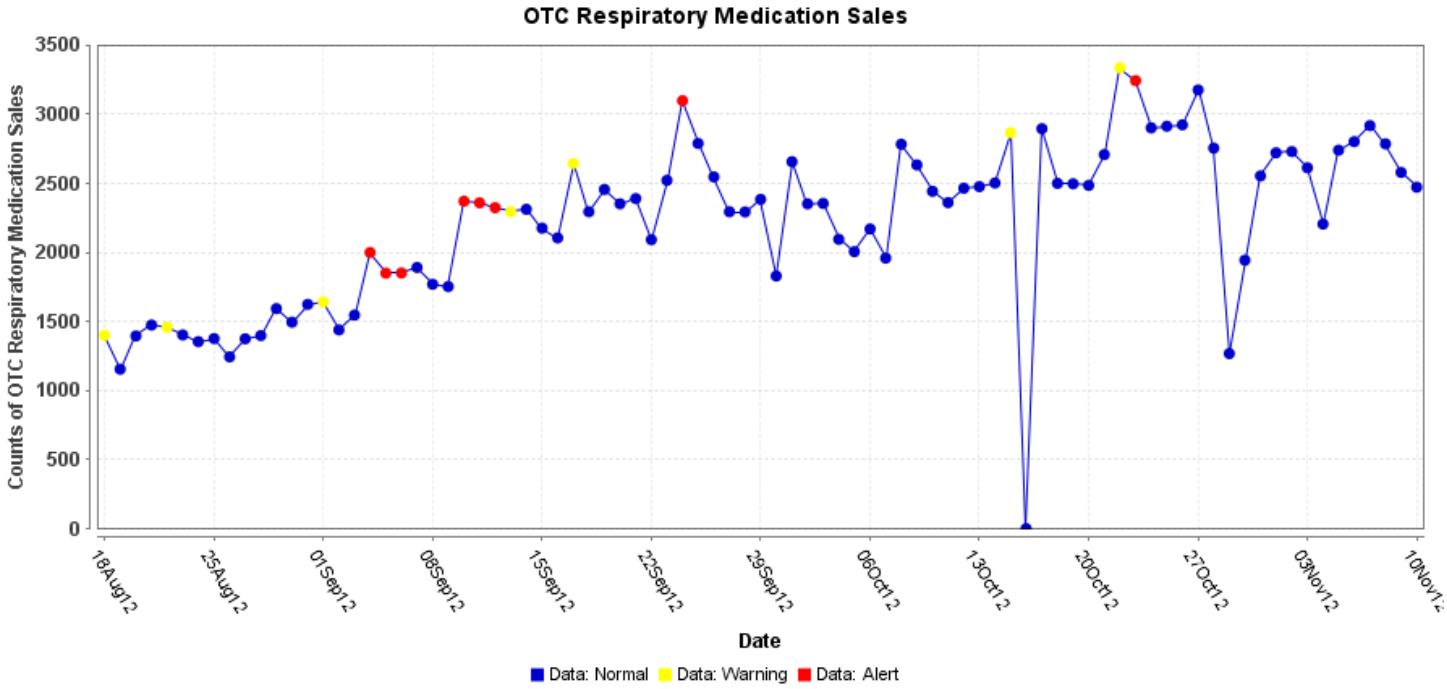
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (MICHIGAN): 9 November 2012, An investigation is underway into a possible link between several E. coli cases and apple cider in Antrim County. The Health Department of Northwest Michigan is working with the Michigan Departments of Agriculture and Rural Development and Community Health to determine whether multiple local illnesses may be linked to the consumption of unlabeled, unpasteurized apple cider. Shiga toxin-producing E. coli (STEC) [also called enterohemorrhagic E. coli - EHEC] bacteria have been detected in stool samples from several Antrim County residents who developed severe intestinal illness and diarrhea during the past 2 weeks. Samples have also been collected to determine whether these cases may be linked to unpasteurized apple cider that was produced locally by an unlicensed facility and without the warning labels required by law for unpasteurized products. According to Joshua Meyerson, MD, Medical Director for the Health Department of Northwest Michigan, apple cider, whether pasteurized or unpasteurized, should be obtained only from licensed facilities or vendors. "Shiga toxin-producing E. coli comes from eating foods contaminated with traces of human or animal feces," Meyerson explained. "This is sometimes associated with under-cooked meat, produce, and unpasteurized cider or dairy goods produced without the necessary safeguards to prevent contamination." Meyerson adds that anyone experiencing abdominal pain and worsening or bloody diarrhea, especially those who may have recently consumed unpasteurized apple cider from an unknown or unlicensed source, should contact a physician. "Symptoms usually appear within 3 to 10 days following exposure," he said. "Young children and the elderly face greater risk of severe complications." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (NEW YORK): 04 November 2012, 16 people in New York State are suffering from E. coli O157:H7 infections, apparently as a result of eating Wegmans Organic Spinach and Spring Mix. The product was supplied to Wegmans by State Garden, Inc. (Chelsea, MA). The outbreak victims are mostly from western New York State. Four people required hospitalization; 3 of those have already been released, according to Peter Constantakes of the New York State Department of Health. Food Safety News reports that the case patients are from Monroe, Niagara, Steuben and Wayne counties. No other states have reported outbreak-associated illnesses so far. According to test results, only products with a use-by date of 23 Oct 2012 are implicated in the illnesses; however, Wegmans has removed all date codes from its stores as a precaution. Wegmans has recalled approximately 31 000 lbs of its Organic Spinach and Spring Mix, sold in 5 oz and 11 oz clam shell packages in the produce department of its stores in New York, Pennsylvania, New Jersey, Virginia, Maryland, and Massachusetts between 14 Oct 2012 and 1 Nov 2012. Wegmans advises customers who purchased this product to discard any that remains in their homes. Customers should visit the service desk at Wegmans for a full refund. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

MARBURG VIRUS DISEASE (UGANDA): 10 November 2012, A one-and-half-year old boy has reportedly died of Marburg virus infection at Ruhoko Hospital in Ibanda District. The District Health Officer, Dr. Julius Bamwine, on Thursday confirmed to 'Saturday Monitor' that the victim died on Wednesday night [7 Nov 2012]. "I can confirm to you that one of the victims from Kikyenkye, who had tested positive for Marburg virus disease died last night. He was the son [of a woman] who succumbed to the same disease recently," Mr Bamwine said. The baby becomes the 2nd person from Ibanda to die [as a result of Marburg virus disease, and the 9th overall in the region to succumb to the killer virus. The Health Ministry confirmed the Marburg virus disease outbreak a month ago in the western district of Kabale. It has since spread to 3 other districts in Western Uganda. The child's mother died of Marburg virus disease at Mbarara Regional Referral Hospital on 23 Oct 2012. Her husband had also tested positive [and survived/died ?]. The boy was admitted at Rukoho Hospital with 4 other suspected cases last week. The number of suspected cases has since gone up to 12. Dr. Bamwine said they are in the process of discharging 8 people who have tested negative while 4 still remain under surveillance as they wait for their results from Uganda Virus Research Institute in Entebbe. At Mbarara hospital, 3 suspected cases admitted last week have tested negative and have been discharged. But on Wednesday 2 more cases were admitted who exhibited symptoms similar to those of the Marburg virus disease. "We have 2 male suspected Marburg patients; one is from Kisenyi in Kakoba Division, Mbarara Town. He had severe nasal bleeding. The other is from Rwampara County in Mbarara. He was vomiting and passed stool with blood," said Ms. Eugenia Namulindwa, the physician in-charge of the isolation unit. Marburg [virus disease] is a rare, severe type of haemorrhagic fever which affects both humans and non-human primates. The virus is reported to be transmitted through bodily fluids like saliva and blood of an infected person, along with touching infected wild animals such as monkeys. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS, HUMAN, CANINE (ARGENTINA): 08 November 2012, The Trade Union of Workers and Municipal Employees (ASOEM by its Spanish initials) of Rio Grande [department, Tierra del Fuego province] has confirmed 2 new cases of brucellosis [by Brucella canis] in workers of the Rio Negro Municipality. The provincial Ministry of Labor has ordered the suspension of activities in the municipal dog pound [animal shelter]. ASOEM director Eduardo Cabral said: "Last week [week of 29 Oct 2012], we had confirmation of 2 new cases of brucellosis in municipal workers and are awaiting the results for other workers. We are talking of about 8 workers with brucellosis." The Administration and Records Secretary noted that this is an incurable disease and complained that in 2010, the union had already asked the Ministry of Labor to close the shelter and make the necessary renovations to keep the animals and the workers separate. "There were no cases of brucellosis at that time." Of note, the animal shelter remains closed by order from the Ministry of Labor after complaints from ASOEM. (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, BOVINE (RUSSIA): 07 November 2012, Russia's Altai region in West Siberia has had an anthrax outbreak, said the country's food safety watchdog, known as Rosselkhoznadzor. A man was diagnosed with anthrax after slaughtering a cow in the village of Bystry Istok in mid-October 2012, Rosselkhoznadzor said in an e-mailed statement today [7 Nov 2012]. The cow might have been infected with anthrax spores at a local pasture, the service said. No other animals or people in the area have infection symptoms yet. The last anthrax case in the village area was in 1964, Rosselkhoznadzor said. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (ARGENTINA): 07 November 2012, Jorge Fossatti, a member of the team that is caring for the patient, indicated that the patient is the 1st serious case of [hantavirus infection] registered so far this year [2012]. The patient is a 61-year-old man from the El Hoyo locality who was taken to the Esquel Area Hospital. He began to have the 1st symptoms in the middle of last week and is now in intensive care. His physicians state that he will come out of this situation [alive]. Fossatti, one of the physicians following the development of the patient, commented that this is [a] serious hantavirus clinical picture, for which they have taken all necessary care-taking measures, and luckily the patient has had a slight improvement. "He has not totally improved, but has shown slight improvement," the physician stated. Fossatti stated that in case the patient totally recovers, no sequelae will remain. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

HEPATITIS A (KUWAIT): 06 November 2012, The Infectious Diseases Hospital allegedly received more than 30 hepatitis A patients within a short period, according to Annahar [newspaper]. Sources revealed that the Preventive Medicine Department has been trying to find reasons behind the spread of the disease for 3 weeks but until now no result has been announced. Meanwhile, health experts have advised the public to refrain from eating fast-food meals to prevent further spread of the disease. They believe the epidemic is local as it might have started amongst some patients who probably consumed contaminated food. The experts said hepatitis A symptoms include feeling cold at the beginning, followed by a sudden rise in temperature and liver enzyme levels, in addition to yellowish eyes. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

****

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable